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# NSLDS II Reengineering Report Detailed Design Overview

Version 2.0

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## Document Control

| <b>Version Number</b> | <b>Description</b> | <b>Release Date</b> | <b>Author</b>      |
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| 1.0                   | Initial Issue      | 9/30/2002           | Allison P. Webster |
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|                       |                    |                     |                    |

## 1 Introduction

This deliverable of detailed report designs builds on the preliminary design for the NSLDS II reports and represents the comprehensive set of reports that will be built for NSLDS II. These reports are designed to support the NSLDS II user community at the Department of Education, schools, guaranty agencies, lenders, and other government agencies. All NSLDS II report designs were created with the intent that they should closely mirror the corresponding report or query of NSLDS.

The majority of NSLDS II reports will be supported through the NSLDS II project in MicroStrategy. This project will run using data in the NSLDS II Data Mart. MicroStrategy will also support the majority of ad hoc querying of NSLDS II data, although some super users will have direct query access to the NSLDS II Enterprise Data Warehouse (EDW).

In a few instances, NSLDS II reports will be generated by executing a DB2 stored procedure(s) after the user submits report parameters through a customized MicroStrategy web screen. Stored procedures were chosen to generate these exception reports because these “reports” were more similar in nature to procedures than reports; stored procedures will be created to deliver other functionality. When interacting with these reports, the user’s experience will not be substantially different than that experienced while generating MicroStrategy reports.

The following documents of the NSLDS II Reengineering Detailed Design deliverable add context to the NSLDS II report designs and should be referenced accordingly.

- **NSLDS II Web Reporting Tutorial:** Introduces key MicroStrategy concepts and details the user’s experience in MicroStrategy, from both a reporting and ad hoc querying perspective
- **MicroStrategy Project Detailed Design:** Details the elements that compose the NSLDS II MicroStrategy Project
- **Reports Detailed Design – Appendix A: NSLDS II Report Matrix:** Inventories the NSLDS II Reports
- **Data Architecture Detailed Design - Appendix B: Data Models for EDW and Data Mart:** Details the structure of the NSLDS II Data Mart
- **Data Architecture Detailed Design - Appendix C: Data Mappings from NSLDS II EDW to Data Mart:** Lists the data mapping between the NSDLS II EDW and NSLDS II Data Mart

## 2 Detailed Design Layout

This section provides an overview of the format used for the NSLDS II report detailed designs, excluding those for the exception reports.

Each design document begins with an introductory list of the reports that compose the report design, followed by the standard template that is described below:

## Report Name

### Overview

|                                  |   |
|----------------------------------|---|
| <b>Description</b>               | Describes the content and purpose of the report. This description will be viewable by the user before executing the report.   |
| <b>User Group</b>                | Lists the general user group for the report (i.e., Department of Education, school, GA, or lender). The intent of this section is not to define security groups for the report. |
| <b>Data Source</b>               | Indicates the data source from which the result set is created.   |
| <b>Output Media</b>              | Indicates the output options available to the user (i.e., online viewing, exportable file)  |
| <b>Frequency</b>                 | Indicates the frequency that this report will run (i.e., on request, monthly, etc.).  |
| <b>Requirements Traceability</b> | Traces the report back to the applicable detailed requirement(s).   |
| <b>Comments</b>                  | Lists any additional information relevant to the report that does not fit in other sections in this chart.  |

### Filter Specifications

| Filter         | Filter Description   | Prompt   | Default                                    | Min/Max   | Type  |
|----------------|--|--|--|---|---|
| Name of Filter | Description of the limitation applied to the report as a result of the filter. | No, if the filter will be applied to the report data set without any input from the user.<br><br>Yes, if input is required from user for filter to be applied. | Default response for prompt, if applicable | Minimum and maximum number of answers that can be selected for the prompt, if applicable. | Type of prompt or filter. (Filter Type Note: See section below for more information on filter types.) |

### Attribute Specifications

| Attribute   | NSLDS Table   | NSLDS Attribute |
|---|---|-----------------|
| Name of attribute (i.e., non-numeric, non-aggregatable data in NSLDS II). | Source table(s) and attribute(s) in the legacy NSLDS system for the attribute.<br><br>These columns are provided solely to demonstrate an understanding of the tables and attributes used to create the result set in NSLDS II. |                 |

### Metric Specifications

| Metric  | Metric Description         | Subtotal/<br>Grand Total  | NSLDS<br>Table   | NSLDS<br>Attribute |
|---|----------------------------|---|--|--------------------|
| Name of Metric (i.e., numeric and aggregatable) | Description of the metric. | Indication of whether subtotaling or grand totaling is allowed on the metric. | Source table(s) and attribute(s) in the legacy NSLDS system for the metric.<br><br>These columns are provided solely to demonstrate an understanding of the tables and attributes used to create the result set in NSLDS II. |                    |

### Hierarchies for Drilling

| Source   | Hierarchy Name                                 | Hierarchy Description                        | NSLDS<br>Table   | NSLDS<br>Attribute |
|--|--|--|--|--------------------|
| Attribute or metric used to drill to another level, across levels, or to another template. | Name of hierarchy (i.e., group of attributes). | Description of the purpose of the hierarchy. | Source table(s) and attribute(s) in the legacy NSLDS system used to create the hierarchy.<br><br>These columns are provided solely to demonstrate an understanding of the tables and attributes used to create the result set in NSLDS II. |                    |

#### Filter Type Note:

Filters can be used in MicroStrategy in two ways, either as a straight filter or as a prompt. Both limit the returned result set. However, a prompt allows the user to specify for a given attribute or metric the way in which the result set will be limited. A filter limits the result identically each time the report is run without any input from the user.

The different classifications of filters and prompts and their purpose are described below. These classifications are referenced as the filter/prompt types in the report detailed designs.

#### Filters:

- Attribute Qualification: Specifies the condition(s) that the attribute elements must satisfy in order to be included in the report results.
- Set Qualification: Specifies the condition(s) using metrics, based on value, rank, or percentage.
- Report as Filter: Uses the result set of an existing report as a report filter in another report.
- Filter Qualification: Allows further qualification using an existing filter (i.e. a new filter is built using one or more existing filters).

#### Prompts:

- Filter Definition Prompt – Choose Attributes in Hierarchy: Allows user to select filtering criteria from hierarchies.

- Filter Definition Prompt – Qualify on Attribute: Allows user to select filtering criteria from attributes and attribute forms.
- Filter Definition Prompt – Choose from Attribute Element List: Allows user to select filtering criteria from attribute element lists.
- Filter Definition Prompt – Qualify on Metric: Allows user to select filtering criteria from metrics.
- Object Prompt: Allows user to select which objects to include in a template, such as attributes, metrics, custom groups, prompts, etc.
- Value Prompt: Allows user to select a single value on which to qualify such as a date, a specific number, or a specific text string.

Some report designs also include a document section. Documents are simply a container for formatting, displaying, and distributing multiple reports. Below is a description of the template used to describe any documents included in the report detailed designs.

**Document**

| Document Name  | Document Object Section              | Document Object Section Description  |
|--|--------------------------------------|--|
| Name of document.                                      | Name of the section of the document. | List of the attributes & metrics included in this section of the document. |
| List of report hyperlinks available from the document. |                                      |  |

### 3 Report Folder Structure

The NSLDS II MicroStrategy project uses folders to organize shared reports. As the number of shared reports grows, the use of a folder structure becomes increasingly important. The folder structure should be designed to enable the user to quickly navigate to the appropriate report. The system administrator will control this folder structure, as well as report security privileges (i.e., within a given folder, which user can access which report). Thus, NSLDS II MicroStrategy users will have access to different folders within the project and conceivably different reports within a specific folder.

The following is an overview of the initial folder structure that will be created in the NSLDS II project in MicroStrategy. Refer to Appendix A – NSLDS II Report Matrix to review the reports that will be aligned to each folder.

- NSLDS II
  - Department of Education (ED)
    - Audit and Program Review
      - Case Management
      - Financial Partners
    - Program Benchmarks
    - Default Management
    - Guaranty Agency
    - Lender
    - Payment Reasonability
    - School
    - Quality Control

Because schools, guaranty agencies, and lenders have a limited number of reports available to them, folders for their reports are not needed at this time. Reports used by schools, guaranty agencies, and lenders will be accessible directly from the main NSLDS II report page.

## **4 Report List**

For a full listing and overview of NSLDS II reports, refer to Appendix A – NSLDS II Report Matrix.